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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,030	02/06/2001	Ingo Hermann	H-205706	620
7.	590 03/23/2004		EXAM	INER
LAWRENCE B. PLANT General Motors Corporation		BASICHAS, ALFRED		
Legal Staff, Mail Code 482-C23-B21			ART UNIT	PAPER NUMBER
P.O. Box 300			3749	

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

- 19	Application No.	Applicant(s)				
	09/778,030	HERMANN ET AL. \bigcap $\Big\backslash$ $\Big\backslash$				
Office Action Summary	Examiner	Art Unit				
	Alfred Basichas	3749				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w. - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	i6(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 06 Fe	ebruary 2001.					
2a) ☐ This action is FINAL . 2b) ☒ This	a) ☐ This action is FINAL . 2b) ☑ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Disposition of Claims						
4) ☐ Claim(s) 1-16 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-16 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers 9) ☐ The specification is objected to by the Examinet 10) ☐ The drawing(s) filed on 06 February 2001 is/are Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction.	relection requirement. f. e: a)⊠ accepted or b)□ objected drawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list of the certified copies of the attached detailed Office action for a list of the certified copies of the attached detailed Office action for a list of the certified copies of the priorical form the International Bureau * See the attached detailed Office action for a list of the certified copies of the certified copies of the priorical form the International Bureau * See the attached detailed Office action for a list of the certified copies of the priorical formation for a list of the priorical formation for a list of the certified copies of the priorical formation for a list of the certified copies of the priorical formation for a list of the certified copies of the priorical formation for a list of the certified copies of the priorical formation for a list of the certified copies of the certified copies of the priorical formation for a list of the certified copies of the certified copies of the priorical formation for a list of the certified copies of the certif	s have been received. s have been received in Application ity documents have been receive (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 05.07,10-2001	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa					

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DETAILED ACTION

Claim Objections

1. Claims 1-16 are objected to because of the following informalities: The term "characterized in that" should be changed to comprising or wherein, so as to comply with accepted U.S. patent practice. Appropriate correction is required.

Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are vague and indefinite as to the scope, as it is not clear whether the claims are dependent or independent. Further, if the claims are independent, the scope remains vague and indefinite as to the scope, as it is not clear whether the subject matter of the claim referred to in the rejected claims is being positively recited.
- 4. Claims 15-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are generally narrative and indefinite,

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failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. Claims 1 and 6-8, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Yabe (5,297,620), which shows all of the claimed limitations. Yabe shows a burner arrangement for the combustion of a fuel gas/oxygen mixture, including a body permeable for the mixture whose surface regions defining the free cross section of flow are covered with an oxidation catalyst (paragraph 9), by a feeder device 1,2 arranged on an intake side of the body.

7. Claims 1-8, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Michel (4,406,611), which shows all of the claimed limitations. Michel shows a burner arrangement for the combustion of a fuel gas/oxygen mixture, including a body permeable for the mixture whose surface regions defining the free cross section of flow are covered with an oxidation catalyst 53, by a feeder device 63 arranged on an intake side of the body, and an electronic igniter 72 downstream of the catalyst.

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 11. Claim 2, as understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Yabe (5,297,620) in view of Fleming (4,643,667). Yabe disclosed substantially all of the claimed limitations, but does not specifically recite that the catalyst be only a layer remote from the inlet. Fleming teaches such an arrangement, in which the first layer near the inlet is non-catalytic, specifically for the purpose of reducing flashback (paragraph 24). Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated the arrangement of Fleming into the invention disclosed by Yabe, so as to further enhance flashback reduction.
- 12. Claims 11-14, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yabe (5,297,620), which shows substantially all of the claimed

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limitations. Yabe does not specifically recite the material utilized for the permeable mass. Official Notice is given that the various claimed manifestations of the permeable mass are all old and well known in the art. This is further supported by applicants claiming of almost all of the various forms, and indicates that this subject matter is lacking any criticality. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated the claimed permeable mass into the invention disclosed by Yabe, so as to provide for an effective permeable mass to carry the catalyst.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alfred Basichas whose telephone number is 703 306 3476. The examiner can normally be reached on Monday through Friday during regular business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 703 308 1935. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0861.

March 19, 2004

Alfred Basichas Primary Examiner 703 306 3476